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EXAMINER

ZERVIGON, RUDY

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM F. DIVERGILIO, VICTOR M. BENVENISTE,
and PETER L. KELLERMAN

Appeal 2009-003555
Application 10/702,368
Technology Center 1700

Decided: January 4, 2010

Before, ROBERT E. NAPPI, MARC S. HOFF, and
CARLA M. KRIVAK, *Administrative Patent Judges*.

NAPPI, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) of the final rejection of claims 13-18 and 20-25.¹ We have jurisdiction under 35 U.S.C. § 6(b).

We reverse the Examiner's rejections of these claims.

INVENTION

The invention is directed to an ion shower system for use in ion implantation. *See Spec:* 1-6. Claim 13 is representative of the invention and reproduced below:

13. An ion shower system, comprising:
- a plasma source operable to generate source gas ions within a chamber, wherein the plasma source further comprises:
 - a plurality of conductor segments;
 - a plurality of capacitors, wherein the conductor segments are serially connected through the plurality of capacitors, wherein the series arrangement of conductor segments and capacitors reside within the chamber;
 - an antenna drive circuit coupled to the plurality of conductor segments, and operable to provide power to the conductor segments and capacitors at a predetermined frequency; and
 - a source gas inlet, wherein the source gas inlet is operable to provide a source gas to the chamber, and wherein the conductor segments, capacitors and antenna drive circuit cooperatively provide energy to charged particles in the chamber, thereby energizing the charged particles and

¹ Claims 1-12 were cancelled and claims 26-29 were withdrawn from consideration in an Amendment after Non-Final, filed April 18, 2006. Claim 19 was cancelled in an Amendment after Non-Final, filed June 6, 2007.

generating a plasma comprising source gas ions and electrons within the chamber due to ionizing collisions between the energized charged particles and the source gas;

an extraction assembly associated with the chamber, and operable to extract source gas ions therefrom.

REFERENCES

Moslehi	US 5,846,883	Dec. 8, 1998
Weiler	WO 01/63981 A1	Aug. 30, 2001

REJECTION AT ISSUE

Claims 13-18 and 20-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Weiler in view of Moslehi. Ans. 3-8.

ISSUE

Rejection of claims 13-18 and 20-25 under 35 U.S.C. § 103(a) as being unpatentable over Weiler in view of Moslehi

Appellants argue on pages 6-7 of the Appeal Brief and pages 4-5 of the Reply Brief that the Examiner's rejection of claim 13 is in error. Appellants argue that neither Weiler nor Moslehi teach conductor segments and capacitors that reside within the chamber. App. Br. 6; Reply Br. 4.

Thus, with respect to claim 13 and dependent claims 14-18 and 20-25, Appellants' contentions present us with the issue: have Appellants shown that the Examiner erred in finding that Weiler in view of Moslehi discloses conductor segments and capacitors that reside within the chamber?²

² Appellants' additional arguments raise further issues which we do not reach as this issue is dispositive of the case.

PRINCIPLES OF LAW

The Examiner bears the initial burden of presenting a prima facie case of obviousness, and Appellant has the burden of presenting a rebuttal to the prima facie case. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). Appellant has the burden, on appeal to the Board, to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006).

ANALYSIS

Rejection of claims 13-18 and 20-25 under 35 U.S.C. § 103(a) as being unpatentable over Weiler in view of Moslehi

Appellants' arguments have persuaded us that the Examiner erred in rejecting claim 13. Independent claim 13 recites "the series arrangement of conductor segments and capacitors reside within the chamber." Appellants argue that Weiler's excitation electrode, located within the chamber, is connected to a high frequency matching network and a high frequency generator that are both located outside the chamber. App. Br. 7. In addition, Appellants argue that Moslehi discloses capacitors located external to the chamber. App. Br. 6. Therefore, Appellants argue that there is nothing within the reference to indicate that any components can be connected to the excitation electrode within the chamber. App. Br. 7. The Examiner finds that combining Moslehi's external capacitors with Weiler's conductor segments located inside the chamber is nothing more than a rearrangement of parts. Ans. 13. However, the Examiner does not provide sufficient evidence to support the finding that one of ordinary skill in the art would have made this modification, nor do we find any teaching in the reference

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that discloses connecting components such as Moslehi's capacitors to conductor segments located within the chamber. Therefore, we will not sustain the Examiner's rejection of claim 13, or claims 14-18 and 20-25 which depend upon claim 13.

CONCLUSION

Appellants have shown that the Examiner erred in finding that Weiler in view of Moslehi discloses conductor segments and capacitors that reside within the chamber.

SUMMARY

The Examiner's decision to reject claims 13-18 and 20-25 is reversed.

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REVERSED

ELD

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